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FY 1999 - FY 2001

Iron bacteria are widespread over the earth. In water resource facilities, iron bacteria are commonly found in toe drains of dams and in wells. Ultimately, iron bacteria may populate well screens, the well pack, and the formation out beyond the well. When this happens, the bacteria (and the polysaccharide slimes they produce) block the water entering the well, lessening its production. Traditionally, wells fouled with iron bacteria have been treated with acids and disinfectants. As with any noxious species, it is less costly to detect iron bacteria and to apply measures which will diminish the existing population before they are firmly established in a well or a portion of an aquifer. This project is assessing and summarizing recent literature on iron bacteria monitoring and treatment which will be used in the related project ER.99.41, Iron Bacteria and Algae Problems in Wells.

- To summarize the recent literature on iron and related bacteria monitoring as it relates to well biofouling
- To summarize how results from various monitoring methods relate to well production
- To summarize recommended maintenance treatments and the interval at which they should occur

A draft literature review and draft monitoring and maintenance plan have been written. While they will both be completed during the second quarter of FY 2000, these are living documents which will be supplemented by on-going field experience.

Upper Colorado Regional Office
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Closed Basin Project